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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,180	10/03/2003	William L. Black	2063.005800	2309
23720	7590	05/20/2005		
WILLIAMS, MORGAN & AMERSON, P.C. 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042			EXAMINER GILMAN, ALEXANDER	
			ART UNIT 2833	PAPER NUMBER

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/679,180	Applicant(s) BLACK ET AL.	
	Examiner Alexander D. Gilman	Art Unit 2833	(Signature)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/02/2004</u> <u>AG</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 8-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Rafert.

With regard to claim 1, Rafert (US 6,497,659) discloses (Fig. 1, 2, 3, 8, 14) an interconnect for a location dependent device (10), comprising:

at least one bus (12 or) adapted to provide at least one bus signal to the location dependent device , and

a plurality of electrical contacts (24, 26 or 56, 58, 60) external to the location dependent device and capable of providing a signal indicative of a physical location of the location dependent device when the location dependent device is installed.

With regard to claim 8, Rafert discloses that at least one circuit element (22) deployed intermediate the first electrical contact and the at least one second electrical contact.

With regard to claims 9, 10, Rafert discloses that the at least one circuit element comprises at least one of a resistor (40), a capacitor (22), a voltage reference circuit, and a trace (406) having a selected resistance.

With regard to claims 11, 12, Rafert discloses control signal and a sensor.

Claims 1, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson, Jr et al.

With regard to claim 1, Johnson, Jr et al. (US 5,435,503) discloses (Fig. 3) an interconnect for a location dependent device (30), comprising:

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at least one bus (MUX) adapted to provide at least one bus signal to the location dependent device , and

a plurality of electrical contacts (contacts disposed in 22-24, 27) external to the location dependent device and capable of providing a signal indicative of a physical location of the location dependent device when the location dependent device is installed.

Claims 1, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Takagi et al

With regard to claims 1, 13 Takagi (US 6,441,748) discloses (Fig. 4, 1, 2) an interconnect for a location dependent device (1), comprising:

at least one bus (15, 16) adapted to provide at least one bus signal to the location dependent device , and

a plurality of electrical contacts (contacts of 20) external to the location dependent device and capable of providing a signal indicative of a physical location of the location dependent device when the location dependent device is installed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al in view of Arratia.

Takagi et al do not explicitly disclose the claimed features of the contacts.

Arratia (US Re. 36,317) disclose a first electrical contact (64) capable of providing a reference', and at least one second electrical contact (66) electrically coupled to the first electrical contact, the second electrical contact being adapted to contact a corresponding electrical contact on the location dependent device when the location dependent device is installed,

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wherein the at least one second electrical contact is at least one of a socket (70) wherein the first electrical contact is adapted to contact a corresponding electrical contact on the location dependent device when the location dependent device is installed.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide in Takagi et al a signal indicative of a physical location of the location dependent device when the location dependent device is installed, as taught by Arratia , to verify status of the connection

With regard to claim 6, Takagi et al when modified by Arratia discloses (Arratia) that a first electrical contact capable of providing a reference (using 76) ; and

at least one second electrical contact optionally electrically coupled to the first electrical contact, the at least one second electrical contact being adapted to contact a corresponding electrical contact on the location dependent device when the location dependent device is installed.

With regard to claim 7. Takagi et al when modified by Arratia discloses (Arratia) that at least one fuse (16) deployed intermediate the first electrical contact and the at least one second electrical contact such that the at least one second electrical contact is capable of being optionally electrically coupled to the first electrical contact.

Claims 13,14, 15, 17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Flick in view of Arratia.

With regard to claim 13, Flick (US 6,771,167) discloses a system, comprising'.

at least one bus (12) capable of transmitting at least one bus signal;

a plurality of interconnects, each being capable of receiving the bus signal from the bus and providing the bus signals to at least one location dependent device (23) associated with the interconnect; and

a plurality of electrical contacts (inherently),

Flick do not disclose providing a signal indicative of a physical location of the location dependent device when the location dependent device is installed.

Arratia (US Re. 36,317) disclose providing a signal (using 28) indicative of a physical location of the location dependent device when the location dependent device is installed

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide in Flick a signal indicative of a physical location of the location dependent device when the location dependent device is installed, as taught by Arratia , to verify status of the connection

With regard to claims 14,15,17 Flick when modified by Arratia, disclose all of the limitations as applied to respective claims 2,5,6 above.

Claims 13, 16, 18, 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flick in view of Rafert

With regard to claim 13, Flick (US 6,771,167) discloses a system, comprising:

at least one bus (12) capable of transmitting at least one bus signal;

a plurality of interconnects, each being capable of receiving the bus signal from the

bus and providing the bus signals to at least one location dependent device (23) associated with the interconnect; and

a plurality of electrical contacts (inherently),

Flick do not disclose providing a signal indicative of a physical location of the location dependent device when the location dependent device is installed.

Rafert (US 6,497,659) disclose providing a signal indicative of a physical location of the location dependent device when the location dependent device is installed (Fig. 2, 3)

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide in Flick a signal indicative of a physical location of the location dependent device when the location dependent device is installed, as taught by Rafert , to verify proper connection of the respective sensor (Rafert, col. 1, lines 60-62)

With regard to claims 16, 18, Flick when modified by Rafert, disclose all of the limitations as applied to respective claims 9 , 11 above.

With regard to claim 19, Flick when modified by Rafert, disclose (Flick) a controller(28).

With regard to claim 20, Flick when modified by Rafert, disclose (Flick) a location dependent sensor (23)

With regard to claim 21, Flick when modified by Rafert, disclose (Flick) an automobile.

Claim 13, is rejected under 35 U.S.C. 103(a) as being unpatentable over Flick in view of Chen.

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With regard to claim 13, Flick (US 6,771,167) discloses a system, comprising'.
at least one bus (12) capable of transmitting at least one bus signal;
a plurality of interconnects, each being capable of receiving the bus signal from the
bus and providing the bus signals to at least one location dependent device (23) associated with
the interconnect; and
a plurality of electrical contacts (inherently).

Flick do not disclose providing a signal indicative of a physical location of the location dependent device
when the location dependent device is installed.

Chen (US 6,775,681) disclose providing a signal (Fig. 4) indicative of a physical location of the location
dependent device when the location dependent device is installed

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was
made to provide in Flick a signal indicative of a physical location of the location dependent device when
the location dependent device is installed, as taught by Chen , to verify status of the connection.

Response to Arguments

Applicant's arguments filed 02/02/2005 have been fully considered but they are not persuasive.
Applicants argue that detecting signal provided by Arratia, Chen and Rafert is not a signal indicative of a
physical location of a location dependent device when the location depeadent device is inlalled.

However, the specification does not provide the information which specific features of the contacts make
them capable to provide signal indicative of a physlcal location of a location dependent device when the
location depeadent device is inlalled. The Arratia, Chen and Rafertpresent interconnect' features
claimed.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to
be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the
claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

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In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the prior art were recited for structural features claimed of the interconnect. That features are common devices transforming detecting signals irrespective of an area of implementation.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander D. Gilman whose telephone number is 571 272-2004. The examiner can normally be reached on Monday-Friday, 10:30 a.m. - 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571 272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

05/13/2005

A handwritten signature in black ink that reads "Alex Gilman". The signature is written in a cursive, flowing style.

**ALEXANDER GILMAN
PRIMARY EXAMINER**